

A brief study in the amount of movement of the mean GDP given management of the economies in the most depressed districts and a scheme to bring growth to those districts not directly using government expenditure.

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7th September 2022

The gross domestic product may be considered as an average of the amount of growth or depression in the microeconomic circumstances of each person. These people may be grouped in districts of about 25,000 to 35,000 and be represented as a third of a parliamentary constituency. For England this would be a total of 1599 districts. A growth of 1% is assumed. The distribution of the growth is assumed to be Gaussian with a standard deviation of 2.5%. A thirty member ensemble of 1599 Gaussian pseudo-random samples has been generated in a LibreOffice Calc spreadsheet. The actual average of each member of the ensemble is calculated and the ensemble of averages itself averaged. The resulting growth is 1.001% to three decimal places. Then four scenarios were considered.

- 1] The rate of depression of the ten most depressed districts was reduced by 1%.
- 2] The growth rate of the ten most depressed districts was reduced to zero.
- 3] The growth rate of the ten most depressed districts were set at the average for the country, 1%.
- 4] The growth rate of the ten most depressed districts was set to the growth rate of the 219th district in order of growth being taken as the growth rate of the least of the metropolitan districts, usually at about 3%. The resulting average of the averages considered.

Ensemble	Average Growth
Original	1.001%
1]	1.007%
2]	1.038%
3]	1.045%
4]	1.062%

The original ensemble is likened to no government intervention. The others are likened to greater government intervention but that the tax burden on the rest of the ensemble is not considered as it would be 10/1599 of the tax burden on those districts. Scenario 1 is believed to be the intervention provided by social welfare support. The other scenarios have to be more complicated to achieve the results needed.

It is understood that when using the mean as a statistical parameter of a distribution the distance that the outliers occur from the mean weights the sample in the mean. So that if there is a way of cancelling the lower outliers then their increased weight in the mean has a greater shift in the mean than anything aimed at the 'average' samples which arguably would have no weight in the mean. The 'cost' of the growth can be characterised by the unit one percent per district. The following table gives the cost of intervention and the equivalent intervention to achieve the same growth increase spread over all districts.

Scenario	Intervention Cost	Equivalent Intervention
Original	0	0
1]	10	11
2]	60	60
3]	70	72
4]	98	99

This study is just an attempt to see this shift in action. There may have to be other short studies like this to see the effect of reducing taxation on the areas in extreme growth and increasing the standard deviation of the curve allowing more extreme values but with government support for the least growth areas would look like overall growth in GDP. It can be the case that a cynical government only wanting growth in GDP would try to encourage extreme growth in areas that already show extreme growth with the growth producing the investment for more growth without any regard for those in the least and increasingly poor areas.

It appears that the increases in growth due to the targeted support is equivalent to a general reduction in taxation spread out over all districts. But the nature of this support is unclear. There has not been government services to target depressed districts before 2022. And it is unclear what that might be. As a matter of speculation I suggest that the growth itself be harnessed to make growth in these depressed districts by having a headquarters of a new contract brokerage. It is assumed that the districts are not contiguous that would receive such a brokerage. The types of new contract would usually be of sale or purchase of goods and services. It is possible to believe that conglomerates and their rationalisation would be included but that the business itself does not have to be in the district of the brokerage.

The brokerage itself may have to be of a type not seen before. Usually the new contracts would be something that accountancy firms, chambers of commerce and their clients and members would speculate on without any professional impetus and arise ‘naturally’ from the districts already in good growth – endogenously. But the work to bring about new growth, that is each new contract one at a time when never previously considered and without that template of previous trade, would happen at the brokerage. The principle concerns of the brokerage is the referral of need of a constituent by the constituent’s Member of Parliament. It is proposed that the only effort needed is to discover a relief of the need by working within the existing rules of law and in best academic practice in the management of research. It is possible to believe that in the early stages the each brokerage could be a subcommittee of the House of Commons. And the people seconded to the subcommittee be party workers in from the constituency offices of the Members. Businesses that would supply the servicing of the need would be co-opted together with the representation of the constituent’s need. There would not have to be a resolution of the House in most cases but a drawing up of a memorandum of contract that would be agreed by the representation of the constituent’s need and the businesses supplying the service. And so on and so forth for each constituent and each Member of the House. In later stages it could be envisioned that the brokerage could be elected members for each constituent directed to meet together by the party whips following the financial understanding of the Treasury as to which districts were in the poorest growth. The money to meet as politicians drawn from the fees for successful brokerage of new contracts, instead of by direct Treasury support. The business of the brokerage in the district providing that boost to the economic circumstances of the district. Over a number of years each of the poorest districts could have a brokerage until out of economic trouble and so on...